

Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

BOOK REVIEWS

Plant Structures. A Second Book of Botany. By JOHN M. COULTER, A.M., Ph.D., Head of Department of Botany, University of Chicago. Twentieth Century Series. Size 5½×8 in., pp. ix+348. Price \$1.20. D. Appleton & Co. 1900.

ORDINARILY the appearance of a new text-book in elementary botany is not a sufficient excuse for more than the usual listing under the head of new publications. Dr. Coulter's *Plant Structures* is a notable exception to this general rule and is well fitted in every respect to belong to a series of text-books to which the title "Twentieth Century" is given. This book is the companion of *Plant Relations*, which appeared in 1899. These two text-books taken together are in the opinion of the reviewer easily the best books which deal with elementary botany.

The author, by calling *Plant Relations* a first book and *Plant Structures* a second book, gives his vote in favor of starting with those things that are best known and likely to create the greatest interest in the mind of the pupil. Many will doubtless dissent from this order, and the author himself shows his freedom from dogmatism on this point in his preface to *Plant Structures*, and he would be the last person to dictate this or any other scheme to the teacher.

The strength of this new book, and the same thing is true of its companion, is that it looks ahead rather than into the past. Many teachers will feel that the books cover too much ground and cover it in a manner that is new and perhaps beyond the average high school of today. This criticism is in reality the highest praise. These books presuppose a teacher who is alive and up to date, who knows his subject and does not teach by assigning pages from text-books, but who exercises selective powers of a high order.

While *Plant Relations* and *Plant Structures* will be placed in the hands of scholars, their greatest mission, the reviewer thinks, will be to stimulate the teacher, to make him feel that botany is alive and not dead, is filled with the aroma of the field and is not primarily a matter of musty herbaria nor of dissection. If the result of these new books should be an exodus of the teachers to the universities to get a touch of the botany of today, Dr. Coulter will have performed a splendid task.

Plant Structures is veritably alive with illustrations, many of which are entirely new and better than any that have preceded. The illustration of the book has been in charge of Dr. Otis W. Caldwell, who has also prepared a very helpful pamphlet of suggestions to teachers to be used in connection with the book.

Throughout *Plant Structures* we find clearness and conciseness of expression, which shows that botany is not hard to understand, but has been made so by authors who have hazy or bungling modes of expression. One of the most helpful features of the book is the summary which is often placed at the beginning of the chapters and enables one to appreciate far better the new material which each chapter presents in logical sequence. Best of all the book is full of life; not only do we find chapters on physiology and ecology at the close, but the author shows throughout that structures are not to be studied for what they are but rather for what they mean. *Plant Structures* and its companion, *Plant Relations*, appear to the reviewer to combine better than any other botanical text-books the three desirable qualities of scientific accuracy, clearness of expression, and attractive style.

HENRY C. COWLES.

THE UNIVERSITY OF CHICAGO.